



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0560; Project Identifier MCAI-2021-00192-T; Amendment 39-21764; AD 2021-21-04]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc., Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Bombardier, Inc., Model BD-700-1A10 and BD-700-1A11 airplanes. This AD was prompted by reports that the sliding bushings in the forward engine mount system were missing. This AD requires an inspection (gap check) of the front and aft engine mounts to verify the proper installation of the sliding bushings, and repair if necessary. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Bombardier, Inc., 200 Côte-Vertu Road West, Dorval, Québec H4S 2A3, Canada; telephone 514-855-2999; email ac.yul@aero.bombardier.com; Internet

<https://www.bombardier.com>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0560.

Examining the AD Docket

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0560; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Elizabeth Dowling, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued TCCA AD CF-2021-04, dated February 15, 2021 (also referred to as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition for certain Bombardier, Inc., Model BD-700-1A10 and BD-700-1A11 airplanes. You may examine the MCAI in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0560.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Bombardier, Inc., Model BD-700-1A10 and BD-700-1A11 airplanes. The NPRM published in the *Federal Register* on July 9, 2021 (86 FR 36243). The NPRM was prompted by reports that the sliding bushings in the forward engine mount system were missing. The NPRM proposed to require an inspection (gap check) of the front and aft engine mounts to verify the proper installation of the sliding bushings, and repair if necessary. The FAA is issuing this AD to address redistribution of load/stress on the mount components, which may decrease the component fatigue life; failure of the mount structural components could result in the loss of the engine attachment to the airframe. See the MCAI for additional background information.

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The following presents the comment received on the NPRM and the FAA's response to the comment.

Request to Update Certain Service Information and Provide Credit for Actions Accomplished Using Previous Service Information

Bombardier, Inc., stated that Bombardier Service Bulletin 700-71-005, dated December 14, 2020, has been updated to Bombardier Service Bulletin 700-71-005, Revision 01, dated April 16, 2021. Bombardier, Inc., commented that the revised service information provides a clarification specifically for a German registered airplane having a serial number with a specific configuration from a previous repair; no other changes were made between revision levels. Bombardier, Inc., requested that, if Bombardier Service Bulletin 700-71-005, Revision 01, dated April 16, 2021, is referenced, credit be provided for operators that have previously completed the applicable actions using Bombardier Service Bulletin 700-71-005, dated December 14, 2020.

The FAA agrees to update this final rule to reference Bombardier Service Bulletin 700-71-005, Revision 01, dated April 16, 2021, for the reasons provided above; the technical content and the intent of the service information remains unchanged. The FAA has also added paragraph (i) of this AD to provide credit for Bombardier Service Bulletin 700-71-005, dated December 14, 2020, for previous actions that were performed before the effective date of this AD. In addition, subsequent paragraphs have been re-identified accordingly.

Conclusion

The FAA reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this final rule with the change described previously and minor editorial changes. The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

The FAA also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

Related Service Information under 1 CFR Part 51

Bombardier, Inc., has issued the following service information.

- Bombardier Service Bulletin 700-1A11-71-005, dated December 14, 2020.
- Bombardier Service Bulletin 700-71-005, Revision 01, dated April 16, 2021.
- Bombardier Service Bulletin 700-71-5005, dated December 14, 2020.
- Bombardier Service Bulletin 700-71-5501, dated December 14, 2020.
- Bombardier Service Bulletin 700-71-6005, dated December 14, 2020.
- Bombardier Service Bulletin 700-71-6501, dated December 14, 2020.

This service information describes procedures for verifying the proper installation of the sliding bushings by doing an inspection (gap check), including a gap outside acceptable limits, a missing or damaged nut or bolt at the upper side of front mount beam, and a bolt that turns freely with finger pressure. These documents are distinct since they apply to different airplane serial numbers. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD affects 376 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
11 work-hours X \$85 per hour = \$935	\$0	\$935	\$351,560

The FAA has received no definitive data on which to base the cost estimates for the repairs specified in this AD.

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress

charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2021-21-04 Bombardier, Inc.: Amendment 39-21764; Docket No. FAA-2021-0560;

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc., Model BD-700-1A10 and BD-700-1A11 airplanes, certificated in any category, serial numbers 9002 through 9879 inclusive, 9998, 60001 through 60005 inclusive, 60007, 60009, 60015, 60016, and 60024.

(d) Subject

Air Transport Association (ATA) of America Code 71, Powerplant.

(e) Unsafe Condition

This AD was prompted by reports that the sliding bushings in the forward engine mount system were missing. The FAA is issuing this AD to address redistribution of load/stress on the mount components, which may decrease the component fatigue life; failure of the mount structural components could result in the loss of the engine attachment to the airframe.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspection and Corrective Action

Within 15 months or 750 flight hours, whichever occurs first, after the effective date of this AD: Verify the proper installation of the sliding bushings by doing an inspection (gap check) for discrepancies of the front and aft engine mounts, in accordance with paragraphs 2.B. through 2.F. of the Accomplishment Instructions of the applicable service information specified in figure 1 to paragraph (g) of this AD. If any discrepancy

is found: Before further flight, repair using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.’s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature. Where a serial number is identified in more than one row in figure 1 to paragraph (g) of this AD, the applicable service information is identified based on the marketing designations in paragraph 1.M., “Equivalent Service Bulletins,” of the service information.

Figure 1 to paragraph (g) – Service Information

Serial Numbers–	Model–	Bombardier Service Bulletin–
9002 to 9312 inclusive, 9314 to 9380 inclusive, and 9384 to 9429 inclusive	BD-700-1A10 airplanes	700-71-005, Revision 01, dated April 16, 2021
9313, 9381, 9432 to 9860 inclusive, 9863 to 9871 inclusive, 9873 to 9879 inclusive, 60005, and 60024	BD-700-1A10 airplanes	700-71-6005, dated December 14, 2020
9861, 9872, 60001 to 60004 inclusive, 60009, and 60016	BD-700-1A10 airplanes	700-71-6501, dated December 14, 2020
9127 to 9383 inclusive, 9389 to 9400 inclusive, 9404 to 9431 inclusive, and 9998	BD-700-1A11 airplanes	700-1A11-71-005, dated December 14, 2020
9386, 9401, 9445 to 9862 inclusive, and 9868 to 9879 inclusive	BD-700-1A11 airplanes	700-71-5005, dated December 14, 2020
60007 and 60015	BD-700-1A11 airplanes	700-71-5501, dated December 14, 2020

(h) No Reporting Requirement

Although the service information identified in table 1 to paragraph (g) of this AD specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(i) Credit for Previous Actions

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 700-71-005, dated December 14, 2020.

(j) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or TCCA; or Bombardier, Inc.'s TCCA DAO. If approved by the DAO, the approval must include the DAO-authorized signature.

(k) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) TCCA AD CF-2021-04, dated February 15, 2021, for related information. This MCAI may be

found in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0560.

(2) For more information about this AD, contact Elizabeth Dowling, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

(I) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Bombardier Service Bulletin 700-1A11-71-005, dated December 14, 2020.

(ii) Bombardier Service Bulletin 700-71-005, Revision 01, dated April 16, 2021.

(iii) Bombardier Service Bulletin 700-71-5005, dated December 14, 2020.

(iv) Bombardier Service Bulletin 700-71-5501, dated December 14, 2020.

(v) Bombardier Service Bulletin 700-71-6005, dated December 14, 2020.

(vi) Bombardier Service Bulletin 700-71-6501, dated December 14, 2020.

(3) For service information identified in this AD, contact Bombardier, Inc., 200 Côte-Vertu Road West, Dorval, Québec H4S 2A3, Canada; telephone 514-855-2999; email ac.yul@aero.bombardier.com; Internet <https://www.bombardier.com>.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the

availability of this material at NARA, email fr.inspection@nara.gov, or go to:

<https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on September 30, 2021.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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